

**BEFORE THE  
SURFACE TRANSPORTATION BOARD**

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**STB Finance Docket No. 35305**

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230838

**PETITION OF ARKANSAS ELECTRIC COOPERATIVE CORPORATION  
FOR A DECLARATORY ORDER**

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**ARKANSAS ELECTRIC COOPERATIVE CORPORATION'S  
REPLY IN SUPPORT OF PETITION TO REOPEN AND FOR INJUNCTIVE RELIEF  
PENDING BOARD-SUPERVISED MEDIATION**

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**Michael A. Nelson  
101 Main Street  
Dalton, MA 01226  
(413) 684-2044**

**Transportation Consultant**

**Eric Von Salzen  
McLeod, Watkinson & Miller  
One Massachusetts Avenue, N.W.  
Suite 800  
Washington, DC 20001  
(202) 842-2345**

**Counsel for Arkansas Electric Cooperative  
Corporation**

**Dated: August 19, 2011**

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REPLY IN SUPPORT OF PETITION TO REOPEN AND FOR INJUNCTIVE RELIEF  
PENDING BOARD-SUPERVISED MEDIATION**

Arkansas Electric Cooperative Corporation (AECC) 1/ supports the Petition filed by Western Coal Traffic League (WCTL) to reopen this proceeding 2/ in order to give effect to the Board's March 31, 2011 Decision in this matter.

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1/ Arkansas Electric Cooperative Corporation is a membership-based generation and transmission cooperative that provides wholesale electric power to electric cooperatives, which in turn serve approximately 504,000 customers, or members, located in each of the 75 counties in Arkansas. In order to serve its 17 member distribution cooperatives, AECC has entered into arrangements with other utilities within the state to share generation and transmission facilities. For example, AECC holds ownership interests in the White Bluff plant at Redfield, Ark. and the Independence plant at Newark, Ark., each of which typically uses in excess of 6 million tons of Powder River Basin (PRB) coal each year. In addition, AECC holds an ownership interest in the Flint Creek plant, at Gentry, Ark., which normally uses in excess of 2 million tons of PRB coal each year. Because of the large volume of PRB coal moved to these plants, AECC has a direct interest in the efficiency of rail transportation from the PRB, which would be undermined by the BNSF tariff that is the subject of the WCTL Petition to Reopen.

2/ WCTL Petition To Reopen And For Injunctive Relief Pending Board-Supervised Mediation ("WCTL Petition To Reopen").

As the Board knows, AECC initiated this proceeding in October 2009 in response to a tariff adopted by BNSF Railway Company (BNSF), which sought to impose on PRB coal shippers an onerous, complex, and ill-defined burden to reduce the deposition of fugitive coal from trains in transit. AECC contended that the tariff constituted an unreasonable practice in violation of 49 USC § 10702 (2).

After lengthy proceedings, the Board agreed that “the tariff at issue here is not reasonable under § 10702 and cannot be enforced.” Arkansas Electric Cooperative Corporation – Petition For A Declaratory Order, FD 35305, served March 31, 2011 (“Dust I”), at 11.

However, because the Board regarded the deposition of fugitive coal as “a problem that must be addressed,” the Board expressed in no uncertain terms its expectation that BNSF and UP and their customers should work together to find a solution to that problem:

[W]e expect that railroads and their customers will collaborate to develop a solution that guarantees that loaded rail cars are fit for safe travel, while also ensuring that commodity spillage during transport is minimized.

Dust I, at 14.

BNSF has ignored the Board’s clear direction to “collaborate” with its customers. WCTL Petition To Reopen explains WCTL’s efforts “to engage the carrier in coal dust mitigation discussions ‘to avoid a replay of the events that resulted in long and costly proceedings’ at the STB.” WCTL Petition To Reopen, at 5. AECC, in cooperation with the National Coal Transportation Association (NCTA) and other shippers, also tried to arrange for BNSF and UP to meet with a large group of shippers, who represent the vast majority of PRB coal traffic, to address the fugitive coal issue at the NCTA Spring Conference in Colorado Springs earlier this year, but AECC’s efforts, like WCTL’s, were spurned by the railroads.

Instead, BNSF has once again acted unilaterally and adopted a new tariff which does not cure the defects that the Board identified in the 2009 tariff.

Most glaringly, the stated justification for the new BNSF tariff relies on the same flawed IDV.2 methodology that the 2009 tariff relied on. The Board ruled in Dust I that the 2009 tariff was invalid in part because “BNSF’s emission standards are unreasonable” (Dust I, at 11), largely due to concerns about “technical aspects of BNSF’s monitoring system and emission standards”, referring specifically to shipper evidence that “the monitoring system produces variable and unreliable results”, that the “monitors do not measure dust deposited on the track”, but instead measure “a variety of particles in the air many feet from the tracks”, and that BNSF failed to validate its methodology. Dust I, at 12-13. The Board said that it “shares many of the Shipper Interests’ concerns regarding the . . . proprietary IDV.2 measurement system.” Id., at 13.

Yet BNSF attempts to justify the new tariff on the basis of the same IDV.2 methodology.

As discussed below, as well as in WCTL’s Petition To Reopen, there are other equally serious problems with the new tariff, which should lead the Board to find it to be unreasonable, in violation of § 10702, just as the Board concluded with respect to the 2009 tariff, if it is necessary for the shipper community to seek such relief again.

Yet this should not be necessary. There is no reason why the railroads and shippers cannot collaborate on reasonable means to reduce the deposition of fugitive coal from trains on the Joint Line and Black Hills Subdivision. It should not be necessary to institute yet another formal proceeding before the Board. AECC joins WCTL in asking the Board to create an

environment in which such reasonable collaboration can occur, by instituting a mediation process, and delaying the implementation of the new BNSF tariff while the mediation is going on.

### Discussion

#### **A. The IDV.2 Standard and the “Safe Harbor” Provision**

In Dust I, the Board found that BNSF’s 2009 tariff was unreasonable in several respects, including its reliance on BNSF’s ad hoc, undisclosed, unverifiable, and demonstrably unreliable IDV.2 methodology. In addition, the Board found that the lack of a “safe harbor” provision that would establish acceptable compliance options was a serious defect in the 2009 tariff. BNSF purports to have made substantive changes in its proposal by eliminating overt reliance on its IDV.2 standard, and adding a “safe harbor” provision. However, closer inspection reveals that BNSF’s actions in these areas are a shell game that conceals BNSF’s lack of responsiveness to the Board’s stated concerns. The IDV.2 methodology was not removed from the process, improved, or even disclosed; it was simply moved off-line, where it was used to generate numbers that ostensibly substantiate the need for spraying. See WCTL Petition To Reopen, at 69. Those numbers are therefore imbued with the same pervasive and incurable defects that Board previously identified in the IDV.2 measurement system. BNSF didn’t fix its measurement system; it simply made sure that its use of the system was put out of sight.

Notwithstanding the numerous documented infirmities of the IDV.2 measurement system that the Board recognized in Dust I, the only “safe harbor” options BNSF has approved in its new tariff are ones that satisfy a more stringent requirement than BNSF articulated in Dust I. In Dust I, BNSF sought an 85% reduction from historical dusting levels.

Here, toppers have only been approved if they produce a measured reduction of 85% or more in addition to the reduction caused by profiling and any changes in coal sizing that already have occurred. WCTL Petition To Reopen, at 70. Profiling and coal sizing previously were estimated to produce a very substantial reduction in dusting even without toppers, so this new standard requires the shippers to remove most of the measured dust that would have been permitted by BNSF in Dust I.

B. Cost-Effectiveness

In Dust I, the Board observed that:

[W]e believe that a general presumption that a tariff should employ cost-effective practices that are reasonably commercially available is a valid standard to be applied to the coal dust problem . . . .

Dust I, at 5. The Board criticized the particular “cost-benefit analysis suggested by the Shipper Interests”, but not the principle that a tariff should be cost-effective. BNSF has not substantiated the cost-effectiveness of either of the standards it has sought to enforce, including the original 85% measured reduction, or the new and more demanding 85% measurement. Indeed, if BNSF believes its own numbers, its Super Trial data appear to show that untreated trains now meet the IDV.2 standard advanced by BNSF in Dust I much more effectively than they did prior to profiling and changes in coal sizing, and that very few trains generate significant observations of dust. <sup>3/</sup> In WCTL Petition To Reopen, VS Richards, Attachment 8 at 6, the 90<sup>th</sup> percentile value of the IDV measure for loaded coal trains passing the trackside monitor at MP 90.7 was 332 in 2010. This is an improvement over the

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<sup>3/</sup> The earlier data are confidential. See BNSF COALDUST 0021307 for the information needed to perform the comparison.

corresponding value of 376 for 2008 shown in Dust I, Reply VS Emmitt, Exhibit 4, and close to the IDV standard of 300 advanced by BNSF in Dust I. At that location, the Super Trial results show that more than 60 percent of untreated trains produce no measurable dust.

For movements via the Black Hills Subdivision, the Super Trial results are even more dramatic. For untreated trains, the 90<sup>th</sup> percentile IDV value measured in the Super Trials is only 74, far below the standard of 245 advanced by BNSF in Dust I.

In Dust I, the Board did not need to conduct a detailed assessment of cost-effectiveness because of the unreasonableness of the proposed tariff on multiple other grounds, including the unreliability of the measurement system and the lack of a safe harbor. Even if such other grounds had effectively been addressed - which, as described above, they have not – the core determinant of the reasonableness of the tariff is the quantity of benefits it produces relative to its costs. Here, BNSF has made no attempt to explain why it would be reasonable for shippers to be compelled to spend tens or hundreds of millions of dollars on toppers to achieve a small improvement to reach the dusting level BNSF originally sought on the Joint Line – or any other specific level – or to spend even a nickel on further dust reductions on the Black Hills Subdivision. The evidence suggests that, even using BNSF's flawed measurement system, material improvements in dusting have been achieved relative to BNSF's own standards.

An action that produces fewer benefits than costs diminishes efficiency and is, on its face, detrimental to the economic health of rail transportation. This is not an abstract issue from an economics textbook – It is a common-sense, real-world necessity to avoid unnecessary waste of resources.

The need for cost-effectiveness was articulated in Dust I by several parties, and was summarized succinctly by DOT:

[S]ound public policy militates in favor of resolving the problem posed by coal dust emissions in the most cost-effective way. See Consolidated Rail Corp, supra; International Union, United Auto., Aerospace & Agr. Implement Workers v. Occupational Safety and Health Administration, 938 F.2d 1310, 1319 (D.C. Cir. 1991) (reasonableness requires a balancing of costs and benefits). In other words, absent a compelling reason to do otherwise, those alternatives that effectively address the issue with the least expenditure of resources should be preferred over those that require more [footnote omitted]. It would be manifestly unreasonable from this perspective to insist upon higher-cost options.

Reply Comments of the United States Department of Transportation, at 7. Likewise, even UP agrees that the efforts on coal dust should be directed towards achievement of “optimal solutions”. WCTL Petition To Reopen, at 59. In economic terms, that means choosing the solution that maximizes the excess of benefits over costs; in English, it’s getting the most benefits for the fewest costs.

Evidence from Dust I demonstrated overwhelmingly that even when there was more dust to control, the use of toppers then being pursued by BNSF failed even the rudimentary requirement that it produce benefits in excess of costs, let alone the optimization standard described above. <sup>4/</sup> Given the dusting reductions that appear to have occurred without the use of spraying, the incremental benefits of spraying have decreased. Unless the costs of spraying have dropped dramatically, there is no possibility that the requirement BNSF now seeks to impose would pass an objective assessment of cost-effectiveness.

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<sup>4/</sup> See, for example, Arkansas Electric Cooperative Corporation’s Rebuttal Evidence And Argument (“AECC Rebuttal”), Rebuttal Verified Statement of Michael A. Nelson (“RVS Nelson”), at 32-44. The lengthy discussion of cost-effectiveness in this rebuttal testimony reflects the fact that in Dust I, BNSF put forth no opening evidence or argument regarding cost-effectiveness, and only began to address cost-effectiveness in its reply filing.



**C. Alternatives To Spraying**

Even if spraying did produce benefits in excess of costs, BNSF has maintained silence regarding the merits of possible alternative methods of dust control that might be more cost-effective. Notwithstanding the lip service paid by BNSF to compaction (see WCTL Petition To Reopen, at 70), alternative actions are conspicuously absent from the Super Trials and the approved safe harbor options without any evidence from BNSF substantiating their omission.

In Dust 1, AECC 5/ and UP 6/ suggested specific alternatives to spraying that prospectively would provide cost-effective options for improving control of fugitive coal dust. The fact that BNSF has not addressed any of them is symptomatic of its failure to engage customers and other stakeholders in the development of the new tariff.

**D. Super Trial Sample Design**

In addition to the omission of alternative methods, and other considerations discussed by WCTL, the Super Trials of toppers were also compromised severely by an important aspect of their sample design. Different toppers were tested in different months (WCTL Petition To Reopen, at 71), but those months vary systematically in terms of exogenous factors that may affect the creation of fugitive coal, including precipitation, wind speed, and even the intensity of the sun in drying the surface of the coal:

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5/ AECC Rebuttal, RVS Nelson, Exhibit 2.

6/ Reply Evidence and Argument of Union Pacific Railroad Company, Reply Verified Statement of Douglas Glass, at 5 (referencing "a variety of alternatives", including mechanical compaction and car covers).

	2010 Temp*	Ave Temp**	2010 Precipitation*	Ave Precip**	2010 Wind*	Ave Wind***
January	-	24	-	0.38	-	10.0
February	-	28	-	0.42	-	10.6
<b>March</b>	<b>39</b>	36	<b>0.78</b>	0.78	<b>10</b>	11.1
<b>April</b>	<b>44</b>	44	<b>1.24</b>	1.64	<b>13</b>	12.2
<b>May</b>	<b>49</b>	53	<b>3.42</b>	2.50	<b>13</b>	10.9
<b>June</b>	<b>63</b>	64	<b>2.90</b>	1.42	<b>9</b>	10.7
<b>July</b>	<b>70</b>	70	<b>1.56</b>	1.56	<b>9</b>	9.5
<b>August</b>	<b>71</b>	69	<b>0.28</b>	0.91	<b>8</b>	9.8
<b>September</b>	<b>61</b>	58	<b>0.07</b>	1.07	<b>10</b>	8.6
October	-	46	-	0.80	-	9.4
November	-	33	-	0.74	-	10.2
December	-	25	-	0.36	-	10.5

Data from Douglas, WY.

**Reported Super Trial months in bold.**

\*See <http://www.wunderground.com/history/airport/KDGW/2010/12/1/MonthlyHistory.html>

\*\*See <http://www.weather.com/weather/wxclimatology/monthly/82633>

\*\*\* See <http://www.wrcc.dri.edu/htmlfiles/westwind.final.html#WYOMING>

This causes two problems:

(1) The Super Trials were conducted basically during spring and summer, when conditions are not representative of a full year. To the extent that the prolonged windy and dry conditions of late fall and winter contribute to an increased tendency for dusting, the Super Trials cannot have assessed the relative effectiveness of different toppers under those circumstances with any degree of reliability. Indeed, the reported Super Trial results provide no assurance that the sprays will even work, or what limitations they will face, during the 3+ months of the year when average temperatures are below freezing; and,

(2) Within the spring and summer testing period, some toppers were tested under conditions that were harsher than others; so some toppers that were approved may have been less effective than some that were disapproved. The ones that were disapproved were tested in March-May and August, while the ones that were approved were tested in June, July

and September. The one tested in September performed well despite very low precipitation and abnormally high average winds. However, the approved ones tested in June and July benefitted from lower winds relative to the one tested in March-May, and greater precipitation relative to the ones tested in March and August.

The sample design thus makes it impossible to reliably distinguish differences in the effectiveness of the toppers from differences in the environments in which they were tested, and there is no assurance that the approved options would actually be the most effective at reducing fugitive coal dust over the course of a year.

E. Super Trial Interpretation (or, Not Enough Water in the Safe Harbor)

BNSF's interpretation of the Super Trial results appears to have been "perfectly ordered" on the percentage of dust reduction achieved by different toppers as determined from the analysis of passive collectors. Put another way, BNSF finds toppers to be acceptable if they produce at least an 85 percent reduction under this standard, and unacceptable if they do not, irrespective of their other attributes. 7/

In addition to the neglect of cost and cost-effectiveness considerations described above, BNSF apparently gives no weight to the prodigious quantities of water required for mass application of any of its "acceptable" topper agents. Indeed, the topper that achieved the highest dust reduction percentage apparently did so in part because it entails mixture of a large amount of concentrated topper agent (2 gallons) with a large amount of water (18 gallons) for each railcar. 8/ Assuming each railcar carries 120 tons of coal, that equates to 0.15

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7/ Compare WCTL Petition To Reopen, at 33 and 75.

8/ WCTL Petition To Reopen, at 33.

gallons of water for each ton of coal that leaves the PRB. While this may not sound like much, at PRB production levels in the range of 400-500 million tons annually, the prospective volume of water needed to apply that topper would be in the range of 60-75 million gallons per year. Even the least water-intensive topper would require no less than 45 million gallons at the 400 million ton annual volume level. BNSF provides no assurance that it is technically or economically feasible to withdraw such volumes from this arid region, or that it has even considered the obstacles pertaining to water supply that almost certainly would be encountered if its tariff were allowed to stand.

**F. No "Free Ride" for BNSF**

It does not require deep investigation of cost-effectiveness to determine that all, or essentially all, of the benefits of controls on fugitive coal dust accrue to the railroads. In Dust <sup>1</sup> the hypothesis was advanced that shippers would benefit from the reduced enroute loss of coal, but AECC's evidence demonstrated that for PRB coal this was negated by the weight of the toppers. <sup>9/</sup> Instead of giving any consideration to the ways it could benefit by being an active participant in actions to reduce fugitive cost-effectiveness, BNSF continues to focus exclusively on actions that would place all of the requirements and costs on shippers.

WCTL has correctly framed this as an equity argument, and it plainly would be inequitable. AECC adds that it is also at the heart of the efficiency problem. BNSF needs to understand that it can't just dump costs on shippers irrespective of the benefits produced. If the actions BNSF proposes were beneficial, BNSF would have easy paths to implement them through negotiation and rate incentives of the type that have supported numerous other

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<sup>9/</sup> AECC Rebuttal, RVS Nelson; at 42-44.

productivity improvements in PRB coal transportation. The coal dust issue keeps coming back to the Board in part because BNSF keeps focusing on shifting costs to shippers rather than on working with shippers to find the most cost-effective way of addressing the issues associated with fugitive coal.

Moreover, the evidence from Dust I established that most of the fugitive coal that lands on rail ballast does so as the result of operational and maintenance decisions and actions on the part of the railroads, and not from the deposition of airborne dust BNSF seeks to control. AECC's evidence in Dust I demonstrated specific operational/maintenance causes of fugitive coal deposition that are corroborated fully by BNSF's data and video evidence. 10/ AECC's evidence also provided specific computations documenting the proportion of coal dust on rail ballast that results from airborne deposition, 11/ and noted the correspondence between changes in BNSF's maintenance practices and BNSF's own observations of increasing depositions of fugitive coal. 12/

BNSF has been silent regarding its own multiple roles in causing the problems about which it complains. The coal dust issue keeps coming back to the Board in part because BNSF keeps trying to duck responsibility for its own decisions and actions.

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10/ AECC Rebuttal, RVS Nelson at 11-15.

11/ AECC's computations were based on Information treated as confidential in Dust I, and are presented at AECC Rebuttal, RVS Nelson at 8-10. However, as discussed in AECC Rebuttal, RVS Nelson at 46-47, they were validated by the public "Connell Hatch" report on coal dust for Queensland Rail, which found that at least 95 percent of coal fouling (in Australia) is from lumps of coal, not from the airborne suspension of dust of the type BNSF seeks to control through its tariff.

12/ AECC Rebuttal, RVS Nelson at 11, n23.

What BNSF refuses to recognize is that the evidence from Dust I suggests that the shippers have a grievance that has not yet even been articulated – i.e., that by virtue of the failure of the railroads to adequately manage maximum train speeds, slack action, modulus changes, turnout maintenance, and other sources of vibration, the railroads – not the shippers - bear responsibility for most of the loss of product that occurs enroute. The Board's decision in Dust I made clear that the carrier was responsible for events that occur after loading. Perhaps in this light, giving up the "free ride" and focusing on the real issues will have greater urgency for BNSF.

#### Conclusion

For all of these reasons, BNSF's latest attempt to impose the entire burden of dust-suppression on shippers fails to satisfy the requirements identified by the Board in Dust I. This course of conduct can lead nowhere but to continued controversy and litigation.

There is an alternative: frank and honest negotiations between the affected parties to find a mutually satisfactory way to solve a common problem. This is what the Board told the parties to do in its Dust I decision. Apparently, the message did not get through to all those who were supposed to hear it.

To get its message across, the Board now should act to stay the effectiveness of the new BNSF tariff, and should encourage – or if necessary require – BNSF to engage in collaboration with its customers through Board-sponsored mediation.

Respectfully submitted,



Eric Von Salzen  
McLeod, Watkinson & Miller  
One Massachusetts Avenue, N.W.  
Suite 800  
Washington, DC 20001  
(202) 842-2345

Counsel for Arkansas Electric Cooperative  
Corporation

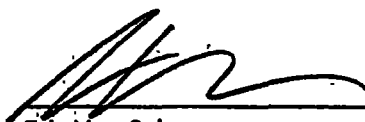
Michael A. Nelson  
101 Main Street  
Dalton, MA 01226  
(413) 684-2044

Transportation Consultant

Dated: August 19, 2011

**CERTIFICATE OF SERVICE**

I hereby certify that on this 19th day of August, 2011, I caused a copy of the foregoing to be served via electronic service on all parties of record on the service list in this action.



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Eric Von Salzen